

1. (currently amended) A communication ~~Communication~~ server for delivering a data stream[[s]] to a remote destination over a communication network, the communication server comprising:

a replacement unit for replacing pieces of data from an intended incoming data stream[[s]] to be received from a remote sender by identical pieces of data retrievable from a data storage accessible thereto, according to references supplied by the remote sender;

~~characterized by~~ an identification unit for identifying the pieces of data to be replaced according to a digital signature that is a function of data contained in said pieces[[,]]; and

~~by~~ an anchor-determination unit for determining locations in the data stream[[s]] where predefined groups of characters from the data stream fulfill a predetermined criterion, the respective locations of such groups being reference points to the respective digital signatures associated with the pieces of data in each group.

2. (currently amended) The communication ~~Communication~~ server according to claim 1, further comprising a messaging unit for notifying a remote sender to stop delivering intended incoming pieces of data which are retrievable from a data storage accessible thereto.

3. (currently amended) The communication ~~Communication~~ server according to claim 2, wherein the remote sender is a PC delivering data.

4. (currently amended) The communication ~~Communication~~ server according to ~~anyone of claims 1 to 3,~~ claim 1, wherein the pieces of data are packets of TCP/IP transmission protocol.

5. (currently amended) The communication ~~Communication~~ server according to ~~anyone of claims 1 to 4,~~ claim 1, further comprising a data storage accessible thereto, wherein the packets are stored in the data storage in blocks of variable size which is determined according to anchor location on the original data stream.

6. (currently amended) The communication ~~Communication~~ server according to ~~anyone of claims 1 to 5,~~ claim 1, wherein the digital signature is based on any of CRC, SHA1 or DES computed value of a predetermined number of bytes from a selected piece of data.

7. (currently amended) The communication ~~Communication~~ server according to ~~anyone of claims 1 to 6,~~ claim 1, wherein the digital signature is calculated from a predetermined number of bytes of data, the location of said bytes in the ~~stream of data~~ stream is in correlation with at least one anchor, and the at least one anchor is a pointer to a location in the ~~stream of data~~ stream having a compatibility with the predetermined criterion.

8. (currently amended) The communication ~~Communication~~ server according to claim 7, wherein the ~~criteria~~ predetermined criterion is a function of data contained in said pieces of data and is independent of a title, address or routing information of said data.

9. (currently amended) The communication ~~Communication~~ server according to claim 8, wherein the function is responsive to a predetermined character combination such that an anchor is assigned upon recognition of said predetermined character combination.

10. (currently amended) The communication ~~Communication~~ server according to claim 9, wherein the predetermined character combination is a short string of predefined characters.

11. (currently amended) The communication ~~Communication~~ server according to claim 9, wherein a set of anchors is assigned to a respective piece of data, each anchor from the set is in correlation to an n-tuple location in said respective piece of data wherein the function is a hash function yielding a predefined value over the n-tuple.

12. (currently amended) The communication ~~Communication~~ server according to claim 11, wherein the hash function is selected from a group containing LFSR, CRC, SHA1, DES, and MD5.

13. (currently amended) The communication ~~Communication~~ server according to ~~anyone of claims 1 to 12,~~ claim 1, wherein files are delivered through P2P communication.

14. (currently amended) A method ~~Method~~ for delivering a data stream[[s]] over a communication network[[s]], the method comprising:

determining reference points in ~~a stream of~~ the data stream being locations in the data stream where a predefined number of characters fulfill a predetermined criterion;

registering a digital signature[[s]] being a value[[s]] returned from a predetermined function taken over a predefined range[[s]] of content, the predefined ranges of content is [[are]] in correlation with the reference points;

using the digital signatures to locate locally stored content, and using the reference points or creating a dictionary and using it for synchronizing between currently received pieces of data and between locally stored matching content.

15. (original) A computer readable media containing instructions for controlling a computer system to implement the method of claim 14.

16. (currently amended) A system ~~System~~ for reducing transportation volumes over a communication network[[s]], comprising at least one communication server as defined in ~~anyone of claims 1 to 13~~ claim 1.